AMENDMENTS TO THE SPECIFICATION

1. Please replace the first full paragraph on page 11 with the following paragraph:

Fig. 4c depicts ~~a third embodiment~~an interconnection between a Processing Node and an Input/Output Processing Node shown in Fig. 4b of the present invention.

2. Please replace the second full paragraph on page 11 with the following paragraph:

Fig. 4d depicts a ~~fourth~~third embodiment of the present invention.

3. Please add a new full paragraph on page 11 prior to the paragraph starting with "Fig. 5a":

Fig. 4e depicts a fourth embodiment of the present invention.

4. Please add a new full paragraph on page 11 prior to the paragraph starting with "Fig. 7":

Fig. 6e depicts a coupling between the first and second array of processing architecture implementing the method of the present invention.

5. Please replace the ninth full paragraph on page 11 with the following paragraph:

~~Fig. 7~~Figs. 7a and 7b ~~depicts~~depict a flow diagram representing the operation of an embodiment of a Processing Node of the present invention.

6. Please replace the paragraph starting at page 16, line 3 and ending at page 16, line 9, with the following paragraph:

In a second embodiment depicted in figure 4b, the AV engine comprises a Input/Output Processing Node (IOPN) **30** coupled to local memory **32** (collectively "IOPN **300**") and a ~~Processing Node (PN) **100**~~ Processing Node (PN) **10** including local memory **12** (collectively "PN **100**"). The PN **100** comprises at least one instruction set central processing unit (CPU) that changes based upon a program instruction. Certain

embodiments of the invention include a PN **100** comprising a plurality of instruction set CPUs.

7. Please replace the paragraph starting at page 19, line 6 and ending at page 19, line 12, with the following paragraph:

Figure 4e depicts a block diagram of a fourth embodiment of the present invention. This embodiment features the AV engine **1000** coupled **1002** to a DeMux Processor **600** and also to the RVCR **97** and the ~~switched network **2**~~switched network, such as the Internet. The AV engine **1000** further comprises at least one array of processing nodes. Each of the processing nodes preferably comprises a pair of dual-CPU as depicted in figure 4c that are bi-directionally coupled to the other pairs of dual-CPU.

8. Please replace the paragraph starting at page 19, line 13 and ending at page 20, line 2, with the following paragraph:

Figure 5a depicts ~~an~~a 4 x 4 array of processing nodes with 2 orthogonal directions. Moreover, the 4 x 4 array of processing nodes are orthogonally coupled (~~R1, R2, R3, R4~~**R0, R1, R2, R3** and ~~C1, C2, C3, C4,~~ **C0, C1, C2, C3)** as depicted in figure 5a. Orthogonally coupled processing nodes ~~indicates~~indicate that each processing node is communicatively coupled to all processing nodes in each orthogonal direction in the array. Communicative coupled processing nodes support bi-directional communications between the coupled processing nodes. Each processing node may contain a communication port for each orthogonal direction.

9. Please replace the paragraph starting at page 24, line 1 and ending at page 24, line 11, with the following paragraph:

In a first embodiment implementing the processing array, the AV engine **1000** comprises a two-dimensional array of processing nodes as depicted in figure 6a. A CPN **400** is positioned at the coordinates [0:0] and a plurality of IOPN **300** are positioned at the processing nodes [1:1,2:2,N-1:N-1]. The CPN **400** may comprise a pair of dual-CPU as depicted in figure 4c. As in previous embodiments, the ~~CP **400**~~CPN **400** operates under program control to perform load balancing of the remote client requests for AV content. The

IOPN **300** in this embodiment may also comprise dual-CPU as previously depicted in figure 4c. However, the preferred IOPN **300** in this and the previous embodiments comprises a pair of dual-CPU and at least an additional I/O CPU to interface with the Ethernet switch. See figure 6b.